Attachment H

Proposal # 2001- C-214 (Office Use Only)

PSP Cover Sheet (Attach to the front of each proposal)

Proposal Title: Sacramento River Floodplain Acquisition and Restoration
Applicant Name: Sacramento River Partners
Contact Name: John Carlon
Mailing Address: 261 E. 3rd Street, Chico, CA 95928
Telephone: (530) 894-3474
Fax: (530) 894-2970
Email: sacriver@c-zone.net

Amount of funding requested: $ 2,219,998
Some entities charge different costs dependent on the source of the funds. If it is different for state or federal funds list below.
State cost _____ Federal cost _____

Cost share partners? ___ Yes X No
Identify partners and amount contributed by each _____

Indicate the Topic for which you are applying (check only one box).

- ☐ Natural Flow Regimes
- ☐ Nonnative Invasive Species
- ☐ Channel Dynamics/Sediment Transport
- ☒ Flood Management
- ☐ Shallow Water Tidal/ Marsh Habitat
- ☐ Contaminants
- ☐ Beyond the Riparian Corridor
- ☐ Local Watershed Stewardship
- ☐ Environmental Education
- ☐ Special Status Species Surveys and Studies
- ☐ Fishery Monitoring, Assessment and Research
- ☐ Fish Screens

What county or counties is the project located in? Glenn County, CA

What CALFED ecozone is the project located in? See attached list and indicate number. Be as specific as possible Ecozone 3.3

Indicate the type of applicant (check only one box):

- ☐ State agency
- ☐ Public/Non-profit joint venture
- ☐ Local government/district
- ☐ University
- ☐ Other: _____
- ☐ Federal agency
- ☒ Non-profit
- ☐ Tribes
- ☐ Private party

Indicate the primary species which the proposal addresses (check all that apply):

- ☐ San Joaquin and East-side Delta tributaries fall-run chinook salmon
- ☒ Winter-run chinook salmon
- ☒ Spring-run chinook salmon
- ☒ Late-fall run chinook salmon
- ☒ Fall-run chinook salmon
- ☐ Delta smelt
- ☐ Longfin smelt
- ☐ Splittail
- ☒ Steelhead trout
- ☐ Green sturgeon
- ☐ Striped bass
- ☐ White Sturgeon
- ☒ All chinook species
- ☒ Waterfowl and Shorebirds
- ☒ All anadromous salmonids
- ☒ Migratory birds
- ☐ American shad
- ☒ Other listed T/E species: Valley Elderberry Longhorn Beetle, Giant Garter Snake

Indicate the type of project (check only one box):

- ☐ Research/Monitoring
- ☐ Watershed Planning
- ☐ Pilot/Demo Project
- ☐ Education
- ☒ Full-scale Implementation

Is this a next-phase of an ongoing project? Yes ____ No x

Have you received funding from CALFED before? Yes ____ No x

If yes, list project title and CALFED number _____

Have you received funding from CVPIA before? Yes ____ No x

If yes, list CVPIA program providing funding, project title and CVPIA number (if applicable):

_____

By signing below, the applicant declares the following:

- The truthfulness of all representations in their proposal;
- The individual signing the form is entitled to submit the application on behalf of the applicant (if the applicant is an entity or organization); and
- The person submitting the application has read and understood the conflict of interest and confidentiality discussion in the PSP (Section 2.4) and waives any and all rights to privacy and confidentiality of the proposal on behalf of the applicant, to the extent as provided in the Section.

John Carlon

Printed name of applicant

Signature of applicant

B. EXECUTIVE SUMMARY

Title of Project:	Sacramento River Floodway Acquisition and Riparian
Amount Requested:	$2,200,574 for 3 years
Applicant:	Sacramento River Partners 261 East 3rd St., Chico, CA 95928
Phone:	(530) 894-3474 **Fax:** (530) 894-2970
Email:	sacriver@c-zone.net
Primary Contact:	John Carlon
Participants:	US Fish and Wildlife Service

Sacramento River Partners and the U.S. Fish and Wildlife Service are requesting $2,247,511 to acquire fee title on 259 acres along the Sacramento River and to restore 95 of these floodplain acres back into wetland and riparian forest. This project will directly address the following CALFED goals: At-Risk Species, Ecosystem Processes and Biotic Communities, Habitats, Non-native Invasive Species, and Sediment and Water Quality.
This acquisition will build on the largest contiguous block of conservation ownership and easements on the Sacramento River. The 12,000-acre Llano Seco Refuge borders the property on the north and a seasonal wetland protected by a Wildlife Conservation Board easement lies to the east. The property is located two miles south of the Goose Lake overflow, in the floodway between the Sacramento River and Angel Slough. Proposed management activities include:

- Protect 27-acres of high quality of existing riparian vegetation.
- Actively convert 96-acres of almond orchard into wetland and riparian forest.
- Adopt and demonstrate wildlife friendly farming activities in the 136-acre walnut orchard in the short-run and restore to riparian forest in the long-term.

Implementing these actions will benefit Spring, Fall, Late-fall, and Winter-run salmon, Steelhead trout, giant garter snake, and Valley Elderberry Longhorn Beetles.
Our hypotheses are that by protecting and restoring this floodway property:

- High quality riparian habitat will rapidly establish, out-compete non-native invasive species, and provide benefits to both migratory and resident wildlife.
- River-floodplain connectivity will function effectively within the existing Goose Lake overflow area.
- Wildlife-friendly farming practices will minimize the orchards negative impacts on water quality.

Diverse, compact, and strategically positioned this project provides an outstanding opportunity to study many of the scientific uncertainties associated with ecosystem restoration. Differences in floodplain storage and floodwater conveyance can be observed between orchards and riparian habitat. Reductions in copper and pesticide usage will be measured. First, from adoption of wildlife-friendly farming practices, and second from conversion of orchards to riparian forest. Factors limiting native species establishment in the floodway will be monitored and compared to natural recruitment inside the levee. This project has the potential to demonstrate floodway land management practices that balance the needs of wildlife, flood control, and agriculture.

C. PROJECT DESCRIPTION

1. Statement of the Problem

a. Problem

Less than 5% of the historical riparian forest along the Sacramento River remains today (DWR 1998). This catastrophic reduction in one of California's most biologically rich habitats (California Partners in Flight 1998) has contributed to the listing of several threatened and endangered species. The many resident and migratory species such as the Valley Elderberry Longhorn Beetle, Swainson's hawk, western yellow-billed cuckoo, California yellow warbler, least Bell's vireo, steelhead trout, Chinook salmon and many other species depend on the Sacramento River (TNC 1998). The loss of riparian forests has been linked to the decline of several species (California Partners in Flight 1998), and the alteration of important ecosystem functions (CALFED 1999).

The intact riparian forest serves many important ecological functions. Riparian forests provide important organic inputs to aquatic food chains (Gregory et al. 1991), improve water quality (Brooks et al. 1993), supply large woody debris (Sparks 1995), and provide critical shaded riverine aquatic (SRA) habitat (Schaffter et al 1982).

In 1988 the Sacramento River National Wildlife Refuge was established, in part, to address the drastic reduction of Valley Elderberry Longhorn Beetle populations. Numerous state, federal, and private initiatives have focused on the need to increase the area, value, and connectivity of the riparian forest along the Sacramento River. Between the Department of Fish and Game and the U.S. Fish and Wildlife Service approximately 15,000 acres of riverine land has already been protected. One thousand four hundred of these acres have been converted from flood-prone agricultural land back into riparian forest. This project will add to a complex of properties set-aside for conservation purposes (Figures 1 and 2).

Objectives

The objectives of this project are to:

- Add 259 acres of fee title acquisition to the largest contiguous block of public ownership on the river.
- Protects 26 acres of existing riparian forest within the levee system.
- Converts a 95-acre almond orchard into forest which will demonstrate that actively planting native trees on floodways rapidly establishes high quality habitat for threatened and endangered species.
- Provide valuable information on riparian vegetation's response to flow components, carbon and nutrient contributions, and changes in non-native invasive species (NIS) populations.
- Implement wildlife-friendly farming practices that minimize the orchard's negative impacts on water quality.
- Demonstrate floodway land management practices that balance the needs of wildlife, flood control, and agriculture.

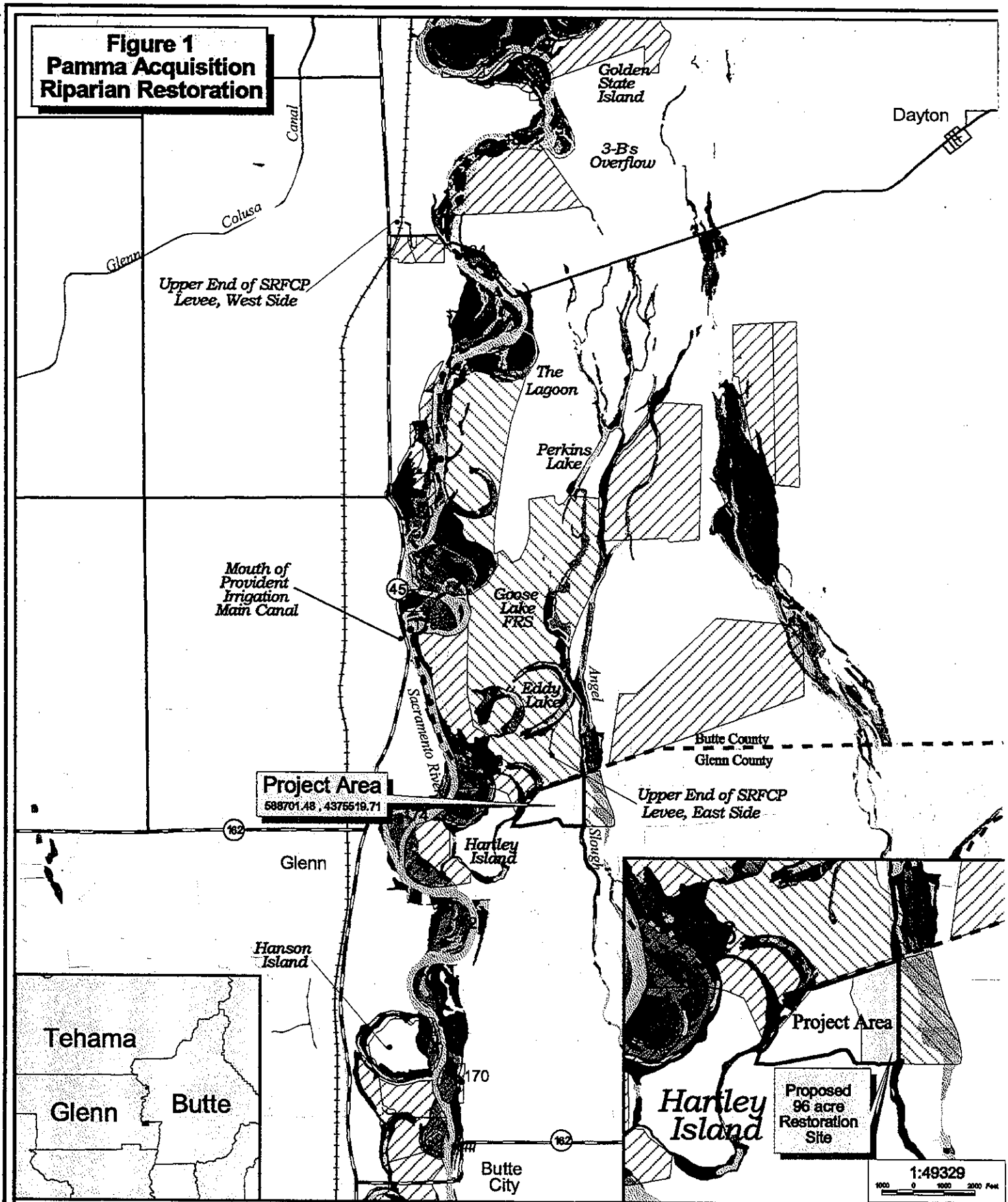


Figure 1
Pamma Acquisition
Riparian Restoration
Golden State Island
3-B's Overflow
Dayton
Canal
Colusa
Glenn
Upper End of SRFCP Levee, West Side
The Lagoon
Perkins Lake
Mouth of Provident Irrigation Main Canal
45
Goose Lake FRS
Angel
Eddy Lake
Sacramento River
Butte County
Glenn County
Project Area
588701.48 , 4375519.71
Upper End of SRFCP Levee, East Side
162
Glenn
Hartley Island
Slough
Hanson Island
Tehama
Glenn
Butte
170
Butte City
Project Area
Hartley Island
Proposed 96 acre Restoration Site
1:49329
Project Boundary
Proposed Restoration
Easement
Public Ownership
State Highway
Major Access
Railroad
County Line
Hydrology
Riparian Vegetation
Berry Scrub
Cottonwood Forest
Disturbed
Disturbed Riparian
Gravel
Herb Land
Marsh
Mixed Forest
Open Water
Riparian Scrub
Valley Oak
1:100000
0.6 0 0.6 1.2 1.8 Miles
N
Based on USGS 1:24000 topo map.
UTM Meters Zone 10 Nad 27
Prepared by,
Geographical Information Center
May 12, 2000


Figure 2
Aerial Photograph
of Pamma Acquisition
Riparian Restoration
Project Boundary
Proposed Restoration
Existing Riparian
Slough Restoration Projec
300 0 300 600 900 1200 Fe
N
Prepared by:
Geographical Information Center
May 12, 2000

Figure 3. Photographs of the Proposed Llano Seco Restoration Site

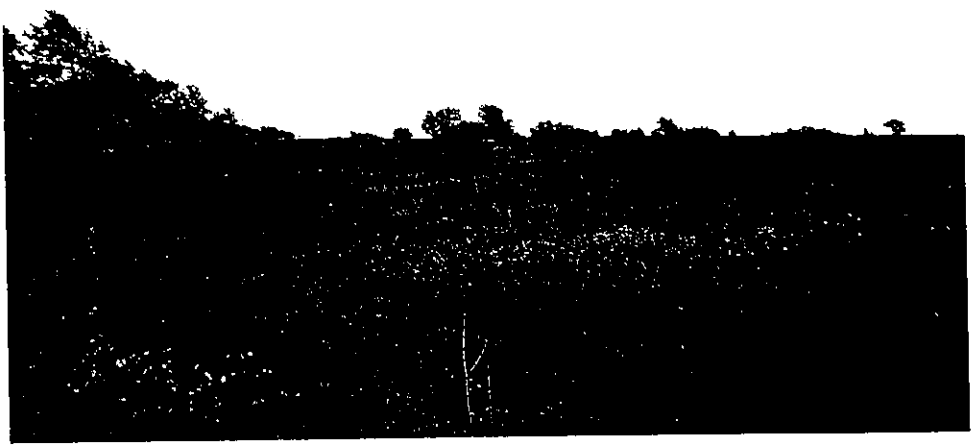
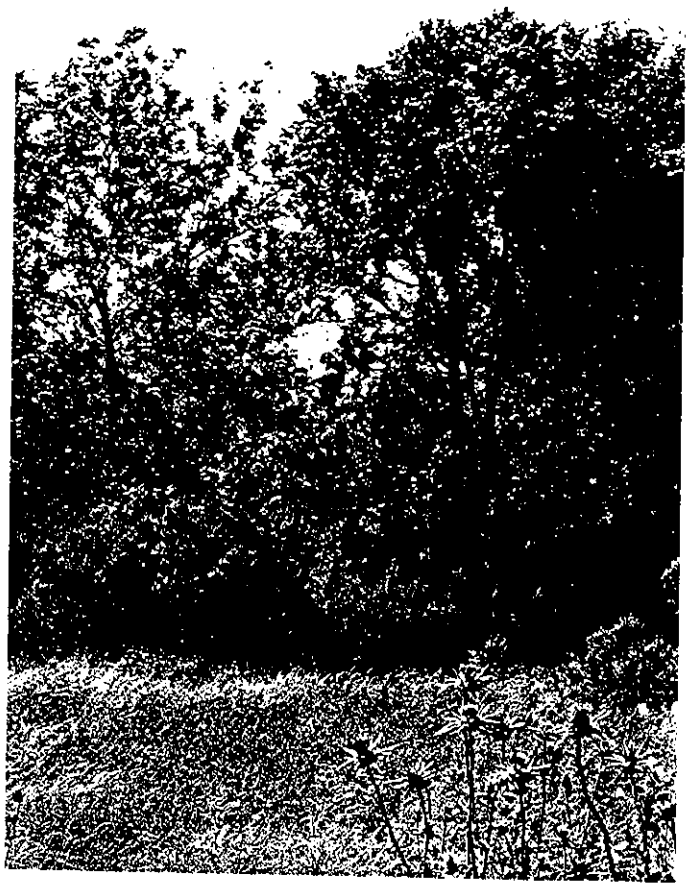


Figure 3. Photographs of the Proposed Llano Seco Restoration Site (continued)



- Provide future opportunities to study differences in floodplain storage and floodwater conveyance between orchards and riparian habitat, and reductions in copper and pesticide use.

b. Conceptual Model

The loss of riparian forests has been linked to the decline of several species (California Partners in Flight 1998) and the alteration of important ecosystem functions (CALFED 1999) This project will improve the habitat base for species and provide other benefits as well. The conversion of this property to wildlife-friendly farming practices and to riparian forest will decrease the input of pesticides and copper to the Delta. The demonstration of agricultural practices that benefit both wildlife and agricultural productivity, could have a multiplying effect on increasing habitat potential throughout the Sacramento Valley, especially on private land. The property straddles the beginning of the project levee and both sides of the levee are subject to overbank flows, one from the river, the other from the floodway. This situation provides an opportunity to examine the response of vegetation to these events. The project also provides a unique opportunity to flow resistence between orchards and restored vegetation in a side by side comparison.

c. Hypotheses Being Tested

This project revolves around the primary hypothesis that active restoration will reduce habitat fragmentation, restore complex riparian habitat, decrease the dominance of non-native plant species, increase available nesting sites and vegetative cover for neotropical birds, and enhance ecological processes (especially the succession of native plant species). The connectivity between the river and the floodway will support native vegetation once it is established. Within the implementation of the project, we will develop a randomized block experiment to evaluate differences between orchard and riparian vegetation. We will compare orchard and native vegetation to changes in organic matter production (important for aquatic food chains).

d. Adaptive Management

We currently incorporate an adaptive management framework into all our projects. We have a number of systems that help us to continually examine and improve project implementation. The methods for doing this include the following:

- Transfer knowledge and technology from other projects. Last year, our organization has restored 283 acres in the same Ecozone as the proposed project. This knowledge provides us with insight into the successful implementation of the proposed project.
- Learn from the monitoring information. Every individual plant in our design is recorded by species and location within a database (which lends itself to GIS analysis). This allows us to recognize patterns (e.g. survival of a single species in a certain soil type) that can be used to better direct management of the site.
- Document activities. For example, our field managers keep weekly report of activities or observations at each site. These records, combined with the monitoring information helps us to better direct future activities at a site.
- Conduct experiments. For example, a recent experiment with cottonwood determined that we could substantially improve (by over 40%) the success of direct cuttings by using a method that required less material and took less effort to plant (SRP unpublished data).

e. Educational Objectives

Collaborate with the Glenn County Office of Education, Butte College, and California State University, Chico to provide hands on learning opportunities.

2. Proposed Scope of Work

a. Location/Geographic Boundaries of the Project

The project is located in Glenn County east of river mile 176L between the Sacramento River and Angel Slough (Figures 1, 2, and 3). The project location is within the identified SB1086 Sacramento River Conservation Area (Draft 1998 Handbook), Ecological Management Zone 3.3 in the Bay-Delta Watershed, the Goose Lake floodway, and the approved acquisition boundary of the Sacramento River National Wildlife Refuge. Partitioned by the federal flood control levee that begins ¾ of a mile upstream, 232 acres of the property are in the Goose Lake overflow floodway and 27 acres are on the riverside of the levee. As pointed out earlier, the project site is also strategically positioned in relationship to existing conservation ownership and extending connectivity in the riparian corridor (Figure 1).

b. Approach

The focus of all management activities will be to implement floodway land management practices that address the needs of wildlife, flood control, and agriculture. Planning is the first critical step in this process and will involve a hydrologic study, environmental assessment, restoration plan, and a farm plan (Figure 4). The specific components of the three major management activities are broken out as follows:

Acquisition – Complete the environmental assessment and close escrow on the Pamma property. Transfer fee title to the USFWS and enter into a cooperative land management agreement.

Farming – Abandon and remove 96 acres of unproductive almond trees. Adopt wildlife-friendly farming practices including, integrated pest management, cover crops, and timing of agricultural operations to reduce risks to wildlife. Manage irrigation scheduling and applications to reduce run-off. Implement these farming practices through a cooperating lessee selected in a competitive open-bid process.

Riparian Restoration – Actively convert 96 acres of flood-prone almond orchard into wetland and riparian forest over a three-year period. Plant and flood an existing 4-acre slough channel to provide habitat for giant garter snake.

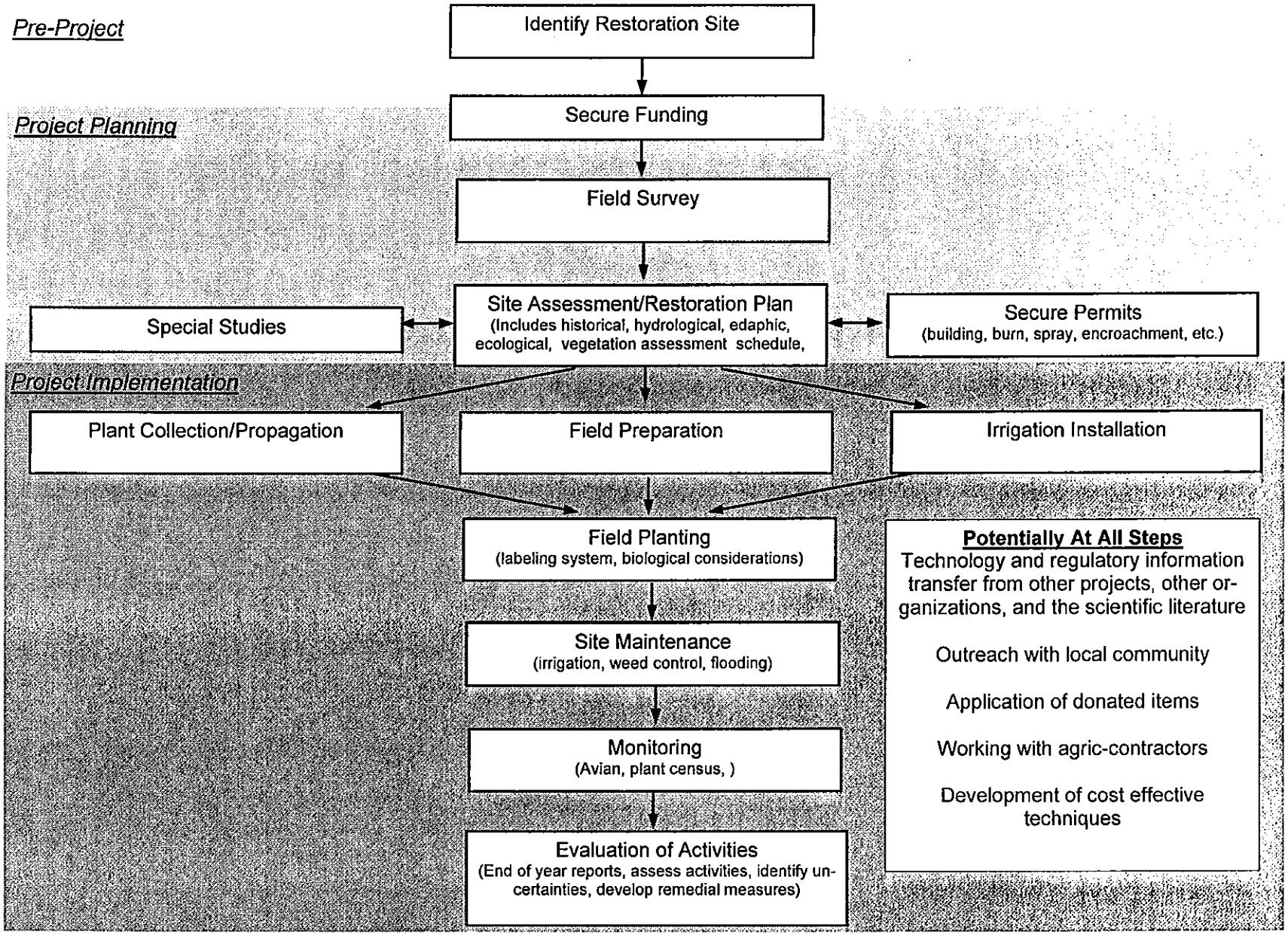
Tasks for the Implementation of the Pamma Restoration

Hydrologic Study: Conduct a through hydraulic evaluation to access the impact of native trees on flood flow conveyance and capacity.

Site Assessment/Restoration Plan: Develop planting composition and density patterns based on the biologic, edaphic (soil), historic, and hydrologic conditions at the site. Specify the community types to be restored, and the planting, irrigation, and weed control measures for the site. We will use 12-20 native trees, shrubs, lianas, and herbaceous plants.

Sacramento River Partners

Figure 4. Summary of Restoration Process



Plant Propagation: SRP employees and volunteers will collect plant material from the surrounding area. Local nurseries will grow plants that cannot be directly planted.
Field Survey: Layout field for planting.
Orchard Removal: Cut down and remove the existing derelict almond orchard.
Field Planting: Prepare field and plant natives in the main field
Native Grass Planting: Plant native grass species in appropriate areas to demonstrate their potential as components of riparian and grassland restoration projects. We will use a no-till drill to plant grass seed will plant quickly and efficiently while minimizing soil disturbance. As most attempts to establish native perennial grasses have been unsuccessful (Treber and Thomas 1999), we will compare species and planting techniques in a randomized block design.
Irrigation Installation: Develop, install, and eventually decommission the irrigation system. The details of this would be developed during the Restoration Plan surveys.
Maintenance: Maintain the irrigation system and other associated tasks.
Weed Control: Control weeds through mowing, spraying or other appropriate.
Monitoring: Measure project performance (including a survival census of plants).
Randomized Block Experiments: Measure the effects of various types of restored vegetation on selected 1) physical and 2) biological processes. We will compare restored vegetation with orchard crops. The randomized block experiment will allow us to statistically detect differences, native and non-native plant recruitment, bird usage, and production of organic matter. In addition, we will examine potential physical changes such as microclimate differences (sunlight, relative humidity, etc.), and the ability for vegetation to trap sediment. Data from this study could be used to increase our understanding of riparian vegetation and flood plain processes. The trees may reach sufficient size to influence these processes, but it is more likely that the project will provide the necessary baseline data, permanent transects, and protocols to answer long-term questions reveal any differences in flow conveyance across the site (between existing orchards and riparian species).
Outreach: Develop a plan and implement public outreach.
Project Management: SRP will manage and administer the project.

c. Monitoring and Assessment Plan

The project will develop a monitoring program that quantifies the short-term success of the project (3 years), yet meets multiple long-term objectives (Table 1). Meaningful long-term data will most likely need to be collected after the project cycle, but this project will develop the experimental design, data collection methods, and baseline data necessary to collect this information. Because our planting design allows use to document individual plants we can gain considerable insight into planting success as a function of soil type, hydrology, and other factors.

Monitoring Parameters, Data Collection, and Data Evaluation - Permanent field markings (using global positioning systems and permanent field markers), across the site at the start of the project. Elevations will be surveyed to the nearest 0.1 foot along each transect to develop a topographic map. This map will be used to guide the different planting designs

(species composition, density, and pattern), and can be incorporated into a computerized Geographical Information System.

Planting success - After the above survey is completed, a dBase IV program (developed by SRP) will be used to design the planting scheme; the exact location and species of every tree and shrub will be planned and tracked with this database. At the end of each growing season, we will census the plants for individual plant survival. We will monitor native grass species by measuring cover in random samples. Data evaluation will be based upon comparisons among communities, soil type, and topographic position.

Avian use monitoring – The Point Reyes Bird Observatory will implement season-long monitoring on the site, including point-counts along permanent transects, nest-searches, and vegetation structure around each nest. Species richness and numbers of individuals for the site will be determined each season.

Hydrologic monitoring – During flood events, flow velocities and depths will be compared between the restored area and existing orchards (walnuts and almonds).

Vegetation-hydrologic interaction –
Our hypothesis is that vegetation inside the overflow will have the same response to flood events as vegetation inside the levee.

d. Data Handling and Storage

The initial planting design and data will be formulated on a dBaseIV database. Further data will be entered, analyzed, and stored on computer in Microsoft Excel worksheets. These initial data will be housed at the SRP office in Chico, California.

In addition, summary data and findings will be publicly available from reports written by SRP for FWS. All reports will be archived at the Sacramento FWS office.

e. Expected Products/Outcomes

Plans produced by this project include a hydrologic study, an environmental assessment, a restoration plan, and a farm plan detailing specific wildlife-friendly farming practices. Physical products are 259 acres protected in public ownership, 96 acres of these acres restored to wetland and mixed riparian forest, and approximately 4 acres restored flooded slough channel.

e. Work Schedule

Acquisition – Acquiring this property is a separate component that could be funded independently for $1,713,564. The U. S. Fish and Wildlife Service has a fully executed purchase agreement that expires August 2001, a completed title search, and an approved appraisal for this acquisition. The next steps (Table 2) will be to conduct an environmental assessment, submit the required documentation to CALFED, and open escrow. At the close

of escrow the U.S. Fish and Wildlife Service will take title to the property and transfer management and restoration responsibilities to Sacramento River Partners.

Farming- Sacramento River Partners will lease out the walnut orchard to a local grower through an open bid process that stipulates wildlife-friendly farming practices by October of 2000. Between September and December of 2000 (post-harvest) 96 acres of almond trees will be cut down and removed. All costs associated with managing the farming program will be generated by lease income and are not included in this request.

Wetland and Riparian Restoration – Planning and seed collection will begin immediately after the award of the grant and actual field planting will begin in March 2001. Please see Table 2 for a comprehensive list of specific restoration tasks and timeframes. The 4-acre slough channel will be restored at the same time as the 96-acre almond orchard. Restoration of the 139 acres of walnut orchard will occur at some point in the future when additional funding becomes available.

f. Feasibility

All of the tasks listed in this proposal have had proven success on the Sacramento River. The U. S. Fish and Wildlife Service in partnership with non-profit conservation groups have acquired over 12,000 acres of land along the river and actively converted over 1,100 of these flood-prone acres into riparian habitat. Sacramento River Partners restored 250 acres of land last year and currently manages over 800 acres of refuge cropland. Farmers working refuge lands are following lease contracts that stipulate wildlife- friendly farming practices. Active reforestation regularly exceeded 75% tree survivorship at the end of three-year establishment periods. The cycle of land acquisition, wildlife-friendly farming, and active restoration has over 10 years of proven success on the Sacramento River. An appropriate mix of species will provide structural and species diversity and provide for recruitment under a variety of weather and hydrological conditions.

Constraints, Agreements, and Permits

Acquisition - complete a level-one environmental contaminate survey, close escrow and transfer title to USFWS.

Farming – Enter into a cooperative land management agreement and secure pesticide use permits from the USFWS, and execute a lease on the walnut orchard with a local grower.

Restoration – Conduct a NEPA and hydraulic analysis to determine encroachment constraints.

Table 1. Monitoring and Data Collection Information for the Llano Seco Riparian Restoration Project

Question to Be Evaluated	Monitoring Parameters	Data Evaluation Approach	Data Priority
Implementation Success	Initiation and completion of tasks	Timeline is followed	High
Planting success	Assess end of season and after planting plant survivorship, document growth in year 3	Use a dBase IV program (developed by SRP) to design the planting scheme, describe the location and species of every planted tree or shrub, and census the plants for survival, and growth, establish photo points across the site	High
Native grass	Percent dominance, frequency, occurance	Collect random herbaceous plot samples from pilot plots	Medium
Restore complex riparian vegetation	Survival measured as density of each species; herbs as cover of each	Comparisons by soil types and topographic position	High
Hydrologic monitoring	Flow velocities and depths	Set-up procedures for monitoring during flood events, and compare between the restored area and existing orchards (walnuts and almonds).	Medium
Avian use monitoring	Point-counts and nest surveys, species richness and numbers of individuals	Collect data along permanent transects and note vegetation structure around each nest.	High
Herbivory	Animal utilization	Qualitative data collection using US Forest Service methodology	Low
Rodent populations	Numbers and species composition	Comparison between treatments using an array of traps	Medium
Successional processes	Cover by weed species, document recruitment of native species	Comparison between treatments, note occurrence of species, establish protocol for future study	Medium
Organic matter output	Biomass and carbon to nitrogen ratios	Comparison between treatments	Medium
Microclimate	Temperature, humidity, light intensity, and wind velocity	Comparison between treatments	Medium

Table 2. Schedule of Tasks and Deliverables for the Proposed Acquisition and Riparian Restoration Project on the Pamma Property.

	Timeline											
	2000	2001				2002				2003		
Task	Fall	Winter	Spring	Summer	Fall	Winter	Spring	Summer	Fall	Winter	Spring	Summer
Acquisition												
Hydrological Study												
Site Assessment												
Restoration Plan												
Plant Collection/Propagation												
Orchard Removal												
Field Survey												
Irrigation Installation												
Field Planting					replants							
Native Grass Planting												
Maintenance												
Monitoring												
Random Block Study												
Outreach												
Project Management												
Deliverable												
Hydrological Report												
Site Assessment Report												
Restoration Plan												
Monitoring Plan												
PRBO Reports												
Planting Report												
Experimental Design Report												
Quarterly Progress Reports												
Annual Progress Report												
Final Report												

D. APPLICABILITY TO CALFED ERP GOALS AND IMPLEMENTATION PLAN AND CVPIA PRIORITIES

1. ERP Goals and CVPIA Priorities

This project directly addresses four of the ERP Goals (CALFED 2000): Goal 1(At Risk Species), Goal 2 (Ecosystem Processes and Biotic Communities), Goal 4 (Habitats), and Goal 5 (Non-native Invasive Species) Specific objectives and targets from the ERP that this project addresses are listed in Table 3. CVPIA priorities are listed in Table 4.

Relationship to Other Ecosystem Restoration Projects

The proposed acquisition restoration proposal builds on existing conservation programs and is closely linked to the following projects:

Riparian Reforestation

FWS – Ord Bend (100 acres), Llano Seco Tract I (65 acres) CALFED Proposal # 97-N03 $1,292,500 (300 acres), Sul Norte (400 acres), Packer Island (120 acres)

U.S. Army Corp of Engineers and Department of Water Resources – Murphy Slough Habitat Restoration Project (300 acres), Murray, Burns and Kienlen Site #29 (90 acres)

Wildlife Conservation Board and California Department of Fish and Game – Riparian restoration at River Mile 166.5 (27 acres) and River Mile 169.5 (67 acres)

Private Restoration Projects – Parrott Investment Corporation and The Nature Conservancy (40 acres), CSU, Chico and The Nature Conservancy at Phelan Island (60 acres)

Princeton-Codora-Glenn and Provident Irrigation District's Anadromous Fish Screen Project

The proposed project will decelerate surface and bank erosion across the channel from the recently constructed fish screens (See Exhibit 1, MBK Engineers 2000).

SB1086

"The establishment of a wide continuous riparian and valley oak woodland should be the first option under the reforestation priority." (DWR, 1998).

3. System-wide Ecosystem Benefits

With restoration, the site will fit into a unique mosaic of freshwater wetland, grassland, slough, and riparian forest habitats in the Llano Seco Unit. The project's strategic location provides benefits on multiple levels. Specifically, this project will achieve the following ecological and biological goals:

Primary Benefits

Ecosystem Processes

- Reduce fragmentation, increase vegetative cover, and increase the connectivity of the riparian corridor along the Sacramento River (Figure 1).

Table 3. Strategic Objectives and Targets from the ERP (February 1999) that the Proposed Project Addresses.

Ecological Process Visions
Strategic Plan Goal (SPG) 2, Objective (Obj) 4 (p. 63): To create flow and temperature regimes in regulated rivers that favor native aquatic species. *SPG 2, Obj 8 (p. 80)*: To increase the extent of freely meandering reaches and other pre-1850 river channel forms. *SPG 2, Obj 2 (p. 100)*: To increase estuarine productivity.
Habitat Visions
SPG 4, Obj 2 (p. 151): To increase the area of riparian and riverine aquatic habitat and an integrated component of restoring large expanses of all major historical habitats in the Central Valley and its rivers. *SPG 4, Obj 2 (p. 158)*: To protect existing and restore and increase the quality of freshwater fish habitat as an integral component of restoring large expanses of all major historical habitat types in the Central Valley and its rivers. *SPG 4, Obj 2 (p. 162)*: To protect existing and restore and increase the quality of essential fish habitat as an integrated component of restoring large expanses of all major historical habitat types in the Central Valley and its rivers.
Species and Species Group Visions
Priority Group I *SPG 1, Obj 2, 3, 4, 5 (p. 220-222)* Winter-run, Spring-Run, Late Fall-Run, Fall-Run Chinook Salmon: To restore self-sustaining Chinook salmon to Central Valley streams and the Bay-Delta estuary. *SPG 1, Obj 6 (p.229)* Steelhead trout: To restore self-sustaining Central Valley steelhead to Central Valley streams and the Bay-Delta estuary.
Priority Group II *SPG 1, Obj 1 (p.241)*: Lamprey Family: To restore anadromous lampreys dependent on the Delta and Suisun Bay. *SPG 1, Obj 4 (p.252)*: Swainson's Hawk: To restore Swainson's hawk populations. *SPG, Obj (not specified) (p. 287)*: Valley Elderberry Longhorn Beetle: To increase and maintain valley elderberry longhorn beetle habitat
Priority Group III *SPG 1, Obj 10 (p. 304), Western Yellow-Billed Cuckoo:* To restore yellow-billed cuckoo throughout its historical range in the Central Valley. *SPG 1, Obj 12 (p. 307), Bank Swallow:* To increase the number of breeding colonies of bank swallow in the Central Valley. *SPG 1, Obj 8 (p. 312), Least Bell's Vireo:* To restore least Bell's vireo to representative habitats throughout its former range. *SPG 1, Obj 7 (p. 314), California Yellow Warbler:* To restore and protect habitats used by neotropical migrant birds for breeding and foraging in the Central Valley.
Priority Group IV *SPG 1, Obj 1 (p. 347), Native Resident Fishes:* To reverse the decline of native resident fishes. *SPG 1, Obj 3 (p. 352), Aquatic Foodweb Organisms:* To restore assemblages of planktonic organisms in the Delta and Suisun Bay to states of increased abundance and greater predictability in composition. *SPG 1, Obj 7 (p. 363), Neotropical Migrant Bird Guild:* To restore and protect habitats used by neotropical migrant birds for breeding and foraging in the Bay-Delta watershed. *SPG not specified (p. 366), Upland Game:* To maintain healthy populations and restore habitats that promote the expansion of populations at levels that can support both consumptive and nonconsumptive uses and provide additional opportunities for those uses.
Stressors
SPG 5, Obj 9 (p. 478): To develop focused control efforts on those introduced species where control is most feasible and of greatest benefit.

Table 4. Considerations for Ranking Specific Actions for CVPIA that the Proposed project Addresses.

Biological Resource Considerations
Magnitude of Benefits to Biological Resources: This project will restore 8,500 linear feet of much needed SRA and other wildlife habitat and connect existing riparian forest into a contiguous 2,000 acre block. *Benefits to Special Status Species*: Valley Elderberry Beetle, Giant Garter Snakes, Chinook Salmon, Steelhead, Yellow-billed Cuckoo, California Yellow Warbler, and Swainson's Hawk will all benefit from this project. *Ecosystem or Multiple Species Benefits:* In addition to the species listed above, the project will benefit other anadromous fish and neotropical migratory birds. *Restoration of Natural Habitats and Habitat Values:* The site will be transformed from abandoned agricultural field vegetated almost exclusively with NIS (low habitat value) to cottonwood-willow and mixed riparian forest (high habitat value). *Long-term Benefits:* Since the area will be indefinitely managed as a wildlife sanctuary by FWS, the benefits will be ongoing. *Immediate Benefits:* The area will improve as wildlife habitat within the first three years. *Effectiveness:* SRP is already implementing the restoration techniques for the proposed project at several other sites within the same Ecozone. *Studies and Investigations:* The proposed project is a full-scale implementation. Sections of the site will be set aside for experimentation.
Implementation Considerations
Continuing/Ongoing Efforts: The proposed project is part of an ongoing effort between SRP and FWS to restore native habitats to the Sacramento River, including the Sacramento National Wildlife Refuge. Other restorations on Llano Seco and other portions of the refuge are already being implemented. *Technical Feasibility*: The project is feasible as large-scale agricultural/restoration techniques will be used to reforest the site. *Timeliness*: SRP is "ready to go" on this project as soon as funding becomes available. We have a proven record of implementing our projects on time and within budget. *Partnerships/Opportunities:* The project will be implemented as a cooperative agreement between SRP and FWS. *"Implementability":* All assessments and permits are in place to implement the majority of this project. The revetment restoration will require another permit from the Army Corps of Engineers and the Bureau of Reclamation. *Public Support:* We are supported by many local groups including the California Native Plant Society, Chico Paddleheads, CSU-Chico, Butte College, the Audubon Society, and others. In addition, neighboring landowners also support the project. *Compatibility:* The project is compatible with SB1086, the Sacramento River Wildlife Area Management Plan, the National Fish and Wildlife Foundation, the North American Waterfowl Management Plan, the Central Valley Habitat and Riparian Joint Ventures, and the California Riparian Habitat Conservation Program.
Economic Considerations
Economic Effects: The project should have a positive economic effect on the fishing industry by supporting populations of salmon, steelhead, and other species. *Project Costs:* The use of large-scale restoration techniques will keep the costs of this project to $5000/acre if the entire project is funded. *Impact on the Water Supply:* The affects of this project will be negligible on the water supply.. The restoration will not change the flow of the river. The irrigation will be done using highly efficient means (T-tape) and will only be carried out for 3 years. *Impact to Water Quality:* The project should improve water quality; the riparian vegetation will serve as a "filter" to remove pollutants from runoff water.

- Initiate natural forest succession within the floodplain by controlling NIS and reintroducing native species.
- Increase inputs of particulate organic matter into the floodway, which would increase the productivity of aquatic food chains, including that of the Bay-Delta ecosystem.
- Improve water quality by reducing/eliminating copper and pesticide inputs.

Habitats

- Restore 96 acres of riparian forest, extending a 2000 acre continuous riparian corridor along 10 miles of the Sacramento River (from river mile 174 to river mile 184). Provide ecological benefits in a short time. For example, benefits to neotropical migrants may be seen within three years of restoration (Geupel *et al.*, 1997).
- Provide habitat for the endangered giant garter snake (4-acre flooded slough channel).

Species

- Benefits a number of key species including: Chinook salmon, steelhead trout, native Cyprinids, Swainson's hawks, western yellow billed cuckoos, wood ducks, neotropical bird guild, valley elderberry longhorn beetles, and giant garter snake.
- Restore important potential bank swallow nesting habitat.

Secondary Benefits

- Enhance the capacity of the Llano Seco Unit to attract various wildlife species.
- Demonstrate successful riparian restoration in an existing floodway that is compatible with flood control and agricultural objectives.
- Demonstrate the relationship between restored vegetation and channel roughness thus improving the design and hydraulic predictability of future restoration projects.

Third Party Benefits

- Reduce flood damage to downstream structures by decelerating flood velocities and capturing floating debris and sediment.
- Provide data on the feasibility restoring riparian vegetation in bypasses and existing floodways.

E. QUALIFICATIONS

Sacramento River Partners (SRP) is a non-profit organization dedicated to the protection and restoration of the natural resources of the Sacramento River. Taking a community based approach the organization builds partnerships with farmers, landowners, other non-profit organizations, and government agencies to ensure that projects succeed with local support. The organization has a proven track record of efficiently and cost-effectively implementing riparian restoration projects.

Since its incorporation in May 1998 the organization has secured $2 million in federal, state, local, and private money for conservation. Since its inception, SRP has planted native riparian species on 283 acres of flood-prone fallow agricultural land along the Sacramento River for both the Wildlife Conservation Board and USFWS. The organization is also managing 800 acres of agency owned land that is slated for later restoration. Prominent projects include restoring a 100-acre riparian forest parcel at Ord Bend in Glenn County, and a 65-acre woodland parcel on the Llano Seco Rancho. Most recently, SRP was awarded a $420,000 contract from the Glenn-Colusa Irrigation District to restore 25 acres of land that includes 3,400 feet of riverbank habitat.

SRP is a team of experienced professionals who can carry out this project in an efficient and ecologically-sound manner:

John Carlon will serve as the Project Director for the proposed project. He obtained a B.S. in agronomy and horticulture from C.S.U., Chico, and a M.S. in International Agricultural Development from C.S.U., San Luis Obispo. A long-time resident of the North Valley, he currently operates an organic blueberry farm in Forest Ranch, and is a member of the University of California's Biologically Integrated Farming Systems Advisory Board. Mr. Carlon has been engaged in land protection and riparian restoration on the Sacramento River for the last eight years - six years with The Nature Conservancy's Sacramento River Project and the last two years as the Project Director for SRP. He has had direct involvement in the acquisition and restoration of over 1000 acres along the river. Mr. Carlon will be responsible for the land acquisition, project management, and grant administration.

Barnard Flynn will serve as the Director of Field Operations. He has a Bachelor's degree from Harvard and a Master's from C.S.U., Chico. Mr. Flynn also has 18 years of experience as a farm manager; currently he co-owner of Shasta View Farms in Gerber, California, a 600-acre almond and prune orchard. He has successfully implemented over 500 acres of riparian restoration along the Sacramento River during the last five years. In the past 10 years, between natives and orchards, he has planted 900 acres of trees. He has developed several innovative restoration practices including a software program that facilitates field planting and monitoring of species survival. Mr Flynn will take the lead in managing the walnut orchard lease and providing general administrative support.

Daniel Efseaff will serve as the Restoration Manager/Ecologist for the proposed project. Mr. Efseaff received a B.S. in Biology from U.C. Davis, and an M.S. in Biology from C.S.U., Chico, where his research focused on the interaction of riparian species with soil types. He has broad experience working for natural resource agencies, consulting firms, and research institutions, and has developed sampling programs for ecological risk assessments, conducted botanical surveys, and recommended planting designs for restoration projects. Currently, he supervises the implementation of 4 separate restoration projects similar to the current proposal. Mr. Efseaff will be responsible for all site assessments and scientific monitoring on the project.

Samantha Mackey Hillaire will be involved with the plant propagation and monitoring aspects of the project. She received a B.S. in Biology from Duke University, and an M.S. in Botany from C.S.U., Chico. Previously, Ms. Hillaire monitored woody species for a long-term forest regeneration project in the Duke Forest. She has been involved in several other botanical projects, including a watershed vegetation inventory on the Shasta-Trinity Forest for the US Forest Service. She serves on the board of the local chapter of California Native Plant Society, and the publications committee of the C.S.U., Chico herbarium. A recent graduate, Ms. Hillaire has worked for SRP for the past year.

Sacramento National Wildlife Refuge Staff will be key members of this project's team. Kevin Forester will be the lead on the acquisition, Ramon Vega will be responsible for the farming program and project management and Joe Silveria will be the acting refuge biologist responsible for planning and monitoring oversight.

Complementing Sacramento River Partners and USFWS staff will be the following experts in riparian restoration; Dr. Tom Griggs - California State University, Chico Research Foundation (Biological), Murray, Burns and Kienlen – Consulting Civil Engineers (Hydraulic), the Geographic Information Center (GIS & mapping), Point Reyes Bird Observatory (Avian monitoring).

There are no expected conflicts of interest or problems in completing this work within the proposed timeline.

F. COST

1. Budget

The acquisition is a stand-alone project at a cost of $1,713,564. This figure is based on an appraisal already approved by the U.S. Fish and Wildlife Service. The total amount requested is $2,219,998 for both the acquisition and the restoration of the almond orchard and slough channel. The restoration costs are consistent with current restoration grants awarded by the U.S. Fish and Wildlife Service the Wildlife Conservation Board. They also reflect fair market value compared with three-year establishment cost of walnut and prune orchards. Table 5 provides detail on the specific costs of the proposed project. Table 6 provides a summary of the project.

Travel costs reflect the expense of transporting staff and equipment to the project site that is approximately 30 miles from our office in Chico. Overhead is charged at a rate of 20% and captures office rent, office supplies, utilities, phones, accounting and legal services, and insurance.

All service contracts will be awarded through an open-bid process.

2. Cost-Sharing

The two cost shares presented with this project are the lease income that will be generated from the farming activity and the staff commitment of the USFWS.

All revenues generated from the lease of the walnut orchard will be used to run the farming program in the short-run and to contribute to the restoration of the walnut orchard in the long term. Projected lease income is expected to range between $4,000 and $10,000 per year (this is a very poor yielding orchard with a low value variety).

The Sacramento River National Wildlife Refuge has committed staff time of the Assistant Refuge Manager and a Wildlife Refuge Biologist to oversee and monitor this project. The USFWS has also paid for the title search and appraisal of the property.

Table 5. Funding for Acquisition and Restoration at PAMMA

Year	Task	Personnel	Direct Labor Hours	Pay Rate /hr.	Subject to Overhead				Cost of Overhead	Service Contracts	Equipment	Totals
					Salary	Benefits	Travel	Supplies				
				ACQUISITION								
	Land Cost		0		$0	$0	$0	$0	$0	$0	$1,700,000	$1,700,000
		Restoration Ecologist	0	$21	$0	$0						
		Field Manager	0	$14	$0	$0						
		Project Director	0	$29	$0	$0						
		Field Equipment Operator	0	$12	$0	$0						
		Biologist	0	$15	$0	$0						
		Laborer	0	$9	$0	$0						
	Contaminant Survey		24		$696	$247	$0	$0	$189	$4,000	$0	$5,132
		Restoration Ecologist	0	$21	$0	$0						
		Field Manager	0	$14	$0	$0						
		Project Director	24	$29	$696	$247						
		Field Equipment Operator	0	$12	$0	$0						
		Biologist	0	$15	$0	$0						
		Laborer	0	$9	$0	$0						
	Close Escrow		125		$3,625	$1,287	$0	$0	$982	$0	$0	$5,894
		Restoration Ecologist	0	$21	$0	$0						
		Field Manager	0	$14	$0	$0						
		Project Director	125	$29	$3,625	$1,287						
		Field Equipment Operator	0	$12	$0	$0						
		Biologist	0	$15	$0	$0						
		Laborer	0	$9	$0	$0						
	Reporting		50		$1,450	$515	$150	$0	$423	$0	$0	$2,538
		Restoration Ecologist	0	$21	$0	$0						
		Field Manager	0	$14	$0	$0						
		Project Director	50	$29	$1,450	$515						
		Field Equipment Operator	0	$12	$0	$0						
		Biologist	0	$15	$0	$0						
		Laborer	0	$9	$0	$0						
	Total for Acquisition		199		$5,771	$2,049	$150	$0	$1,594	$4,000	$1,700,000	$1,713,564
				RESTORATION								
Year 1	Hydrologic Study		32		$609	$155	$120	$0	$189	$7,000	$0	$8,073
		Restoration Ecologist	20	$21	$413	$147						
		Project Director	1	$29	$23	$8						
		Field Equipment Operator	0	$12	$0	$0						
		Biologist	11	$15	$172	$0						
		Laborer	0	$9	$0	$0						
	Site Assessment		57		$1,122	$314	$215	$700	$487	$400	$0	$3,238
		Restoration Ecologist	40	$21	$827	$294						
		Field Manager	0	$14	$0	$0						
		Project Director	2	$29	$58	$21						
		Field Equipment Operator	0	$12	$0	$0						
		Biologist	15	$15	$237	$0						
		Laborer	0	$9	$0	$0						

Year	Task	Personnel	Direct Labor Hours	Pay Rate /hr.	Subject to Overhead				Cost of Overhead	Service Contracts	Equipment	Totals
					Salary	Benefits	Travel	Supplies				
	NEPA		50		$1,242	$441	$0	$0	$337	$30,000	$0	$32,019
		Restoration Ecologist	25	$21	$517	$183						
		Field Manager	0	$14	$0	$0						
		Project Director	25	$29	$725	$257						
		Field Equipment Operator	0	$12	$0	$0						
		Biologist	0	$15	$0	$0						
		Laborer	0	$9	$0	$0						
	Restoration Plan		87		$1,683	$461	$326	$1,000	$721	$1,400	$0	$5,591
		Restoration Ecologist	60	$21	$1,240	$440						
		Field Manager	0	$14	$0	$0						
		Project Director	2	$29	$58	$21						
		Field Equipment Operator	0	$12	$0	$0						
		Biologist	25	$15	$385	$0						
		Laborer	0	$9	$0	$0						
	Plant Propagation		24		$390	$29	$90	$19,500	$4,024	$750	$0	$24,783
		Restoration Ecologist	4	$21	$83	$29						
		Field Manager	0	$14	$0	$0						
		Project Director	0	$29	$0	$0						
		Field Equipment Operator	0	$12	$0	$0						
		Biologist	20	$15	$308	$0						
		Laborer	0	$9	$0	$0						
	Field Survey/Layout		64		$1,049	$157	$240	$1,100	$547	$3,000	$0	$6,093
		Restoration Ecologist	20	$21	$413	$147						
		Field Manager	0	$14	$0	$0						
		Project Director	1	$29	$29	$10						
		Field Equipment Operator	0	$12	$0	$0						
		Biologist	35	$15	$538	$0						
		Laborer	8	$9	$68	$0						
	Irrigation Installation		80		$938	$255	$300	$480	$395	$100,000	$0	$102,367
		Restoration Ecologist	4	$21	$83	$29						
		Field Manager	20	$14	$288	$102						
		Project Director	0	$29	$0	$0						
		Field Equipment Operator	30	$12	$346	$123						
		Biologist	0	$15	$0	$0						
		Laborer	26	$9	$221	$0						
	Field Planting		143		$1,379	$158	$536	$2,600	$935	$49,500	$10,000	$65,108
		Restoration Ecologist	0	$21	$0	$0						
		Field Manager	16	$14	$231	$82						
		Project Director	1	$29	$29	$10						
		Field Equipment Operator	16	$12	$184	$65						
		Biologist	0	$15	$0	$0						
		Laborer	110	$9	$935	$0						

Year	Task	Personnel	Direct Labor Hours	Pay Rate /hr.	Subject to Overhead				Cost of Overhead	Service Contracts	Equipment	Totals
					Salary	Benefits	Travel	Supplies				
	Orchard Removal		36		$694	$246	$135	$0	$215	$3,000	$0	$4,291
		Restoration Ecologist	0	$21	$0	$0						
		Field Manager	24	$14	$346	$123						
		Project Director	12	$29	$348	$124						
		Field Equipment Operator	0	$12	$0	$0						
		Biologist	0	$15	$0	$0						
		Laborer	0	$9	$0	$0						
	Native Grass Planting		0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		Restoration Ecologist	0	$21	$0							
		Field Manager	0	$14	$0							
		Project Director	0	$29	$0							
		Field Equipment Operator	0	$12	$0							
		Biologist	0	$15	$0							
		Laborer	0	$9	$0							
	Maintenance		81		$1,024	$332	$304	$8,000	$1,932	$5,000	$4,000	$20,592
		Restoration Ecologist	0	$21	$0	$0						
		Field Manager	40	$14	$577	$205						
		Project Director	0	$29	$12	$4						
		Field Equipment Operator	30	$12	$346	$123						
		Biologist	0	$15	$0	$0						
		Laborer	11	$9	$90	$0						
	Monitoring		120		$2,163	$440	$450	$600	$796	$8,800	$0	$13,249
		Restoration Ecologist	60	$21	$1,240	$440						
		Field Manager	0	$14	$0	$0						
		Project Director	0	$29	$0	$0						
		Field Equipment Operator	0	$12	$0	$0						
		Biologist	60	$15	$923	$0						
		Laborer	0	$9	$0	$0						
	Random Block Study		60		$1,177	$352	$225	$120	$388	$0	$0	$2,262
		Restoration Ecologist	48	$21	$992	$352						
		Field Manager	0	$14	$0	$0						
		Project Director	0	$29	$0	$0						
		Field Equipment Operator	0	$12	$0	$0						
		Biologist	12	$15	$185	$0						
		Laborer	0	$9	$0	$0						
	Outreach		26		$488	$151	$98	$267	$205	$1,000	$0	$2,209
		Restoration Ecologist	10	$21	$207	$73						
		Field Manager	4	$14	$58	$20						
		Project Director	4	$29	$116	$41						
		Field Equipment Operator	4	$12	$46	$16						
		Biologist	4	$15	$62	$0						
		Laborer	0	$9	$0	$0						

Year	Task	Personnel	Direct Labor Hours	Pay Rate /hr.	Subject to Overhead				Cost of Overhead	Service Contracts	Equipment	Totals
					Salary	Benefits	Travel	Supplies				
	Project Management		501		$12,705	$4,483	$0	$400	$3,523	$1,400	$0	$22,511
		Restoration Ecologist	180	$21	$3,721	$1,321						
		Field Manager	8	$14	$115	$41						
		Project Director	300	$29	$8,700	$3,089						
		Field Equipment Operator	8	$12	$92	$33						
		Biologist	5	$15	$77	$0						
		Laborer	0	$9	$0	$0						
	Totals Year 1		1361		$26,662	$7,974	$3,039	$34,767	$14,693	$211,250	$14,000	$312,386
Year 2	Plant Propagation		8		$125	$3	$30	$6,500	$250	$750	$0	$7,658
		Restoration Ecologist	0	$21	$8	$3						
		Field Manager	0	$14	$0	$0						
		Project Director	0	$29	$0	$0						
		Field Equipment Operator	0	$12	$0	$0						
		Biologist	8	$15	$117	$0						
		Laborer	0	$9	$0	$0						
	Field Replanting		49		$505	$84	$182	$2,000	$554	$16,500	$0	$19,826
		Restoration Ecologist	0	$21	$0	$0						
		Field Manager	8	$14	$115	$41						
		Project Director	1	$29	$29	$10						
		Field Equipment Operator	8	$12	$92	$33						
		Biologist	0	$15	$0	$0						
		Laborer	32	$9	$269	$0						
	Native Grass Planting		86		$902	$203	$323	$20,460	$4,378	$15,000	$0	$41,265
		Restoration Ecologist	0	$21	$0	$0						
		Field Manager	8	$14	$110	$39						
		Project Director	0	$29	$12	$4						
		Field Equipment Operator	39	$12	$450	$160						
		Biologist	0	$15	$0	$0						
		Laborer	39	$9	$332	$0						
	Maintenance		80		$1,008	$328	$300	$4,000	$1,127	$5,000	$0	$11,762
		Restoration Ecologist	0	$21	$0	$0						
		Field Manager	40	$14	$577	$205						
		Project Director	0	$29	$0	$0						
		Field Equipment Operator	30	$12	$346	$123						
		Biologist	0	$15	$0	$0						
		Laborer	10	$9	$85	$0						
	Monitoring		120		$2,163	$440	$450	$600	$796	$20,000	$0	$24,449
		Restoration Ecologist	60	$21	$1,240	$440						
		Field Manager	0	$14	$0	$0						
		Project Director	0	$29	$0	$0						
		Field Equipment Operator	0	$12	$0	$0						
		Biologist	60	$15	$923	$0						
		Laborer	0	$9	$0	$0						

Year	Task	Personnel	Direct Labor Hours	Pay Rate /hr.	Subject to Overhead				Cost of Overhead	Service Contracts	Equipment	Totals
					Salary	Benefits	Travel	Supplies				
	Random Block Study		60		$1,177	$352	$225	$60	$376	$0	$0	$2,190
		Restoration Ecologist	48	$21	$992	$352						
		Field Manager	0	$14	$0	$0						
		Project Director	0	$29	$0	$0						
		Field Equipment Operator	0	$12	$0	$0						
		Biologist	12	$15	$185	$0						
		Laborer	0	$9	$0	$0						
	Outreach		26		$488	$151	$98	$267	$205	$1,000	$0	$2,209
		Restoration Ecologist	10	$21	$207	$73						
		Field Manager	4	$14	$58	$20						
		Project Director	4	$29	$116	$41						
		Field Equipment Operator	4	$12	$46	$16						
		Biologist	4	$15	$62	$0						
		Laborer	0	$9	$0	$0						
	Project Management		481		$12,125	$4,277	$0	$400	$3,366	$1,400	$0	$21,568
		Restoration Ecologist	180	$21	$3,721	$1,321						
		Field Manager	8	$14	$115	$41						
		Project Director	280	$29	$8,120	$2,883						
		Field Equipment Operator	8	$12	$92	$33						
		Biologist	5	$15	$77	$0						
		Laborer	0	$9	$0	$0						
	Totals Year 2		910		$18,368	$5,835	$1,607	$34,287	$11,052	$59,650	$0	$130,927
Year 3	Maintenance		80		$1,008	$328	$300	$4,000	$1,127	$5,000	$0	$11,762
		Restoration Ecologist	0	$21	$0	$0						
		Field Manager	40	$14	$577	$205						
		Project Director	0	$29	$0	$0						
		Field Equipment Operator	30	$12	$346	$123						
		Biologist	0	$15	$0	$0						
		Laborer	10	$9	$85	$0						
	Monitoring		120		$2,163	$440	$450	$600	$796	$20,000	$0	$24,449
		Restoration Ecologist	60	$21	$1,240	$440						
		Field Manager	0	$14	$0	$0						
		Project Director	0	$29	$0	$0						
		Field Equipment Operator	0	$12	$0	$0						
		Biologist	60	$15	$923	$0						
		Laborer	0	$9	$0	$0						
	Random Block Study		60		$1,177	$352	$225	$60	$376	$0	$0	$2,190
		Restoration Ecologist	48	$21	$992	$352						
		Field Manager	0	$14	$0	$0						
		Project Director	0	$29	$0	$0						
		Field Equipment Operator	0	$12	$0	$0						
		Biologist	12	$15	$185	$0						
		Laborer	0	$9	$0	$0						

Year	Task	Personnel	Direct Labor Hours	Pay Rate /hr.	Subject to Overhead				Cost of Overhead	Service Contracts	Equipment	Totals
					Salary	Benefits	Travel	Supplies				
	Outreach		26		$488	$151	$98	$267	$205	$1,000	$0	$2,209
		Restoration Ecologist	10	$21	$207	$73						
		Field Manager	4	$14	$58	$20						
		Project Director	4	$29	$116	$41						
		Field Equipment Operator	4	$12	$46	$16						
		Biologist	4	$15	$62	$0						
		Laborer	0	$9	$0	$0						
	Project Management		501		$12,705	$4,483	$0	$400	$3,523	$1,400	$0	$22,511
		Restoration Ecologist	180	$21	$3,721	$1,321						
		Field Manager	8	$14	$115	$41						
		Project Director	300	$29	$8,700	$3,089						
		Field Equipment Operator	8	$12	$92	$33						
		Biologist	5	$15	$77	$0						
		Laborer	0	$9	$0	$0						
	Totals Year 3		787		$17,541	$5,754	$1,073	$5,327	$6,027	$27,400	$0	$63,121
			0									
Project Duration	Hydrologic Study		32		$609	$155	$120	$0	$189	$7,000	$0	$8,073
		Restoration Ecologist	20	$21	$413	$147						
		Field Manager	0	$14	$0	$0						
		Project Director	1	$29	$23	$8						
		Field Equipment Operator	0	$12	$0	$0						
		Biologist	11	$15	$172	$0						
		Laborer	0	$9	$0	$0						
	Site Assessment		57		$1,122	$314	$215	$700	$487	$400	$0	$3,238
		Restoration Ecologist	40	$21	$827	$294						
		Field Manager	0	$14	$0	$0						
		Project Director	2	$29	$58	$21						
		Field Equipment Operator	0	$12	$0	$0						
		Biologist	15	$15	$237	$0						
		Laborer	0	$9	$0	$0						
	NEPA		50		$1,242	$441	$0	$0	$337	$30,000	$0	$32,019
		Restoration Ecologist	25	$21	$517	$183						
		Field Manager	0	$14	$0	$0						
		Project Director	25	$29	$725	$257						
		Field Equipment Operator	0	$12	$0	$0						
		Biologist	0	$15	$0	$0						
		Laborer	0	$9	$0	$0						
	Restoration Plan		87		$1,683	$461	$326	$1,000	$721	$1,400	$0	$5,591
		Restoration Ecologist	60	$21	$1,240	$440						
		Field Manager	0	$14	$0	$0						
		Project Director	2	$29	$58	$21						
		Field Equipment Operator	0	$12	$0	$0						
		Biologist	25	$15	$385	$0						
		Laborer	0	$9	$0	$0						

Year	Task	Personnel	Direct Labor Hours	Pay Rate /hr.	Subject to Overhead				Cost of Overhead	Service Contracts	Equipment	Totals
					Salary	Benefits	Travel	Supplies				
	Plant Propagation		32		$515	$32	$120	$26,000	$4,274	$1,500	$0	$32,441
		Restoration Ecologist	4	$21	$91	$32						
		Field Manager	0	$14	$0	$0						
		Project Director	0	$29	$0	$0						
		Field Equipment Operator	0	$12	$0	$0						
		Biologist	28	$15	$424	$0						
		Laborer	0	$9	$0	$0						
	Field Survey/Layout		64		$1,049	$157	$240	$1,100	$547	$3,000	$0	$6,093
		Restoration Ecologist	20	$21	$413	$147						
		Field Manager	0	$14	$0	$0						
		Project Director	1	$29	$29	$10						
		Field Equipment Operator	0	$12	$0	$0						
		Biologist	35	$15	$538	$0						
		Laborer	8	$9	$68	$0						
	Irrigation Installation		80		$938	$255	$300	$480	$395	$100,000	$0	$102,367
		Restoration Ecologist	4	$21	$83	$29						
		Field Manager	20	$14	$288	$102						
		Project Director	0	$29	$0	$0						
		Field Equipment Operator	30	$12	$346	$123						
		Biologist	0	$15	$0	$0						
		Laborer	26	$9	$221	$0						
	Field Planting+Replants		192		$1,884	$242	$719	$4,600	$1,489	$66,000	$10,000	$84,934
		Restoration Ecologist	0	$21	$0	$0						
		Field Manager	24	$14	$346	$123						
		Project Director	2	$29	$58	$21						
		Field Equipment Operator	24	$12	$277	$98						
		Biologist	0	$15	$0	$0						
		Laborer	142	$9	$1,204	$0						
	Orchard Removal		36		$694	$246	$135	$0	$215	$3,000	$0	$4,291
		Restoration Ecologist	0	$21	$0	$0						
		Field Manager	24	$14	$346	$123						
		Project Director	12	$29	$348	$124						
		Field Equipment Operator	0	$12	$0	$0						
		Biologist	0	$15	$0	$0						
		Laborer	0	$9	$0	$0						
	Native Grass Planting		86		$902	$203	$323	$20,460	$4,378	$15,000	$0	$41,265
		Restoration Ecologist	0	$21	$0	$0						
		Field Manager	8	$14	$110	$39						
		Project Director	0	$29	$12	$4						
		Field Equipment Operator	39	$12	$450	$160						
		Biologist	0	$15	$0	$0						
		Laborer	39	$9	$332	$0						

Year	Task	Personnel	Direct Labor Hours	Pay Rate /hr.	Subject to Overhead				Cost of Overhead	Service Contracts	Equipment	Totals
					Salary	Benefits	Travel	Supplies				
	Maintenance		241		$3,040	$987	$904	$16,000	$4,186	$15,000	$4,000	$44,116
		Restoration Ecologist	0	$21	$0	$0						
		Field Manager	120	$14	$1,730	$614						
		Project Director	0	$29	$12	$4						
		Field Equipment Operator	90	$12	$1,038	$368						
		Biologist	0	$15	$0	$0						
		Laborer	31	$9	$260	$0						
	Monitoring		360		$6,489	$1,321	$1,350	$1,800	$2,389	$48,800	$0	$62,148
		Restoration Ecologist	180	$21	$3,721	$1,321						
		Field Manager	0	$14	$0	$0						
		Project Director	0	$29	$0	$0						
		Field Equipment Operator	0	$12	$0	$0						
		Biologist	180	$15	$2,768	$0						
		Laborer	0	$9	$0	$0						
	Random Block Study		180		$3,530	$1,057	$675	$240	$1,140	$0	$0	$6,641
		Restoration Ecologist	144	$21	$2,976	$1,057						
		Field Manager	0	$14	$0	$0						
		Project Director	0	$29	$0	$0						
		Field Equipment Operator	0	$12	$0	$0						
		Biologist	36	$15	$554	$0						
		Laborer	0	$9	$0	$0						
	Outreach		78		$1,464	$454	$293	$800	$615	$3,000	$0	$6,626
		Restoration Ecologist	30	$21	$620	$220						
		Field Manager	12	$14	$173	$61						
		Project Director	12	$29	$348	$124						
		Field Equipment Operator	12	$12	$138	$49						
		Biologist	12	$15	$185	$0						
		Laborer	0	$9	$0	$0						
	Project Management		1483		$37,535	$13,243	$0	$1,200	$10,412	$4,200	$0	$66,590
		Restoration Ecologist	540	$21	$11,162	$3,962						
		Field Manager	24	$14	$346	$123						
		Project Director	880	$29	$25,520	$9,060						
		Field Equipment Operator	24	$12	$277	$98						
		Biologist	15	$15	$231	$0						
		Laborer	0	$9	$0	$0						
	Total for Restoration		3058		$62,696	$19,567	$5,719	$74,380	$31,772	$298,300	$14,000	$506,434
	Total for Acquisition and Restoration		3257		$68,467	$21,616	$5,869	$74,380	$33,366	$302,300	$1,714,000	$2,219,998

Table 6: Summary of Funding for PAMMA Acquisition and Restoration

Year	Task	Direct Labor Hours	Subject to Overhead				Cost of Overhead	Service Contracts	Equipment	Totals
			Salary	Benefits	Travel	Supplies				
					ACQUISITION					
	Land Cost	0	$0	$0	$0	$0	$0	$0	$1,700,000	$1,700,000
	Contaminant Survey	24	$696	$247	$0	$0	$189	$4,000	$0	$5,132
	Close Escrow	125	$3,625	$1,287	$0	$0	$982	$0	$0	$5,894
	Reporting	50	$1,450	$515	$150	$0	$423	$0	$0	$2,538
Total for Acquisiton		**199**	**$5,771**	**$2,049**	**$150**	**$0**	**$1,594**	**$4,000**	**$1,700,000**	**$1,713,564**
					RESTORATION					
Year 1	Hydrologic Study	32	$609	$155	$120	$0	$189	$7,000	$0	$8,073
	Site Assessment	57	$1,122	$314	$215	$700	$487	$400	$0	$3,238
	NEPA	50	$1,242	$441	$0	$0	$337	$30,000	$0	$32,019
	Restoration Plan	87	$1,683	$461	$326	$1,000	$721	$1,400	$0	$5,591
	Plant Propagation	24	$390	$29	$90	$19,500	$4,024	$750	$0	$24,783
	Field Survey/Layout	64	$1,049	$157	$240	$1,100	$547	$3,000	$0	$6,093
	Irrigation Installation	80	$938	$255	$300	$480	$395	$100,000	$0	$102,367
	Field Planting	143	$1,379	$158	$536	$2,600	$935	$49,500	$10,000	$65,108
	Orchard Removal	36	$694	$246	$135	$0	$215	$3,000	$0	$4,291
	Native Grass Planting	0	$0	$0	$0	$0	$0	$0	$0	$0
	Maintenance	81	$1,024	$332	$304	$8,000	$1,932	$5,000	$4,000	$20,592
	Monitoring	120	$2,163	$440	$450	$600	$796	$8,800	$0	$13,249
	Random Block Study	60	$1,177	$352	$225	$120	$388	$0	$0	$2,262
	Outreach	26	$488	$151	$98	$267	$205	$1,000	$0	$2,209
	Project Management	501	$12,705	$4,483	$0	$400	$3,523	$1,400	$0	$22,511
	Totals Year 1	1361	$26,662	$7,974	$3,039	$34,767	$14,693	$211,250	$14,000	$312,386
Year 2	Plant Propagation	8	$125	$3	$30	$6,500	$250	$750	$0	$7,658
	Field Replanting	49	$505	$84	$182	$2,000	$554	$16,500	$0	$19,826
	Native Grass Planting	86	$902	$203	$323	$20,460	$4,378	$15,000	$0	$41,265
	Maintenance	80	$1,008	$328	$300	$4,000	$1,127	$5,000	$0	$11,762
	Monitoring	120	$2,163	$440	$450	$600	$796	$20,000	$0	$24,449
	Random Block Study	60	$1,177	$352	$225	$60	$376	$0	$0	$2,190
	Outreach	26	$488	$151	$98	$267	$205	$1,000	$0	$2,209
	Project Management	481	$12,125	$4,277	$0	$400	$3,366	$1,400	$0	$21,568
	Totals Year 2	910	$18,493	$5,838	$1,607	$34,287	$11,052	$59,650	$0	$130,927
Year 3	Maintenance	80	$1,008	$328	$300	$4,000	$1,127	$5,000	$0	$11,762
	Monitoring	120	$2,163	$440	$450	$600	$796	$20,000	$0	$24,449
	Random Block Study	60	$1,177	$352	$225	$60	$376	$0	$0	$2,190
	Outreach	26	$488	$151	$98	$267	$205	$1,000	$0	$2,209
	Project Management	501	$12,705	$4,483	$0	$400	$3,523	$1,400	$0	$22,511
	Totals Year 3	787	$17,541	$5,754	$1,073	$5,327	$6,027	$27,400	$0	$63,121
Total for Restoration		**3058**	**$62,696**	**$19,567**	**$5,719**	**$74,380**	**$31,772**	**$298,300**	**$14,000**	**$506,434**
Total for Acquisition +Restoration		**3257**	**$68,467**	**$21,616**	**$5,869**	**$74,380**	**$33,366**	**$302,300**	**$1,714,000**	**$2,219,998**

G. LOCAL INVOLVEMENT

Sacramento River Partners is a local grassroots conservation organization. Members of the community will implement every phase of the proposed restoration work from the ecologist planning the project to neighboring farmers disking the fields and planting the trees. This community directed project will build local interest, foster understanding, and develop conservation capacity.

We have discussed this project with all five of the adjoining landowners and three of them have written letters in support of the project. The other two landowners have taken a neutral position on the acquisition. Another letter of support is attached from a farmer who previously owned this property. He knows firsthand this property is not "prime farmland", that the levee offers no protection from the flooding of the Goose Lake overflow, and that agricultural investments in this land simply do not pay.

Supervisor Denny Bungarz was briefed on this project and invited, along with any other interested Glenn County officials, to visit the site and review our proposal. Proposals have also been sent to the Glenn County Clerk of the Board of Supervisors and Director of Planning. To date, no one has expressed specific opposition to the project.

We also contacted the chair (Denny Bungarz) and coordinator (Burt Bundy) of the SB1086 Committee/NPO in order to present the proposal to the SB1086 Advisory Council for review. Unfortunately, the Advisory Council meeting was canceled. The proposed project is **within** the designated SB1086 Sacramento River Conservation Area and in our opinion consistent with the goals and objectives of the Draft 1998 Handbook.

Potential Third Party Impacts:

- Loss in county tax revenue – "Federal and State land acquisitions in the Sacramento River floodplain have no significant impact on Glenn County Fund Revenues" (Adams, Gallo, 1999).
- Flood Conveyance –A through hydraulic evaluation will be conducted to insure that the design of the riparian planting does not negatively effect capacity of the flood system or flow distribution.
- Loss of Agricultural Jobs – more jobs will be created than are lost as a result of this project.

Public Outreach Plan

- SRP will host a minimum of 6 work and/or field days for interested parties and local community members over the life of the project.
- Host media field days to inform the public on the benefits of riparian restoration.
- Collaborate with Glenn County Office of Education, Butte College, and California State University Chico to provide hands-on learning opportunities.

H. COMPLIANCE WITH STANDARD TERMS AND CONDITIONS

SRP agrees to comply with the terms and conditions listed in Attachments E and D of the CALFED Proposal Solicitation Package (CALFED 2000).

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J. THRESHOLD REQUIREMENTS

Filename

STATE OF CALIFORNIA

NONDISCRIMINATION COMPLIANCE STATEMENT

STD. 19 (REV. 3-95) FMC

COMPANY NAME

Sacramento River Partners

The company named above (hereinafter referred to as "prospective contractor") hereby certifies, unless specifically exempted, compliance with Government Code Section 12990 (a-f) and California Code of Regulations, Title 2, Division 4, Chapter 5 in matters relating to reporting requirements and the development, implementation and maintenance of a Nondiscrimination Program. Prospective contractor agrees not to unlawfully discriminate, harass or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, disability (including HIV and AIDS), medical condition (cancer), age, marital status, denial of family and medical care leave and denial of pregnancy disability leave.

CERTIFICATION

I, the official named below, hereby swear that I am duly authorized to legally bind the prospective contractor to the above described certification. I am fully aware that this certification, executed on the date and in the county below, is made under penalty of perjury under the laws of the State of California.

OFFICIAL'S NAME

John Carlon

DATE EXECUTED

May 15, 2000

EXECUTED IN THE COUNTY OF

Glenn

PROSPECTIVE CONTRACTOR'S SIGNATURE

PROSPECTIVE CONTRACTOR'S TITLE

President

PROSPECTIVE CONTRACTOR'S LEGAL BUSINESS NAME

Sacramento River Partners

STANDARD CLAUSES - SERVICE & CONSULTANT SERVICE CONTRACTS FOR $5,000 & OVER WITH NONPUBLIC ENTITIES

Workers' Compensation Clause. Contractor affirms that it is aware of the provisions of Section 3700 of the California Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that Code, and Contractor affirms that it will comply with such provisions before commencing the performance of the work under this contract.

National Labor Relations Board Clause. In accordance with Public Contract Code Section 10296, Contractor declares under penalty of perjury that no more than one final, unappealable finding of contempt of court by a federal court has been issued against the Contractor within the immediately preceding two-year period because of Contractor's failure to comply with an order of a federal court which orders Contractor to comply with an order of the national Labor Relations Board.

Nondiscrimination Clause. During the performance of this contract, the recipient,Ccontractor and its subcontractors shall not deny the contract's benefits to any person on the basis of religion, color, ethnic group identification, sex, age, physical or mental disability, nor shall they discriminate unlawfully against any employee or applicant for employment because of race, religion, color, national origin, ancestry, physical handicap, mental disability, medical condition, marital status, age (over 40), or sex. Contractor shall insure that the evaluation and treatment of employees and applicants for employment are free of such discrimination. Contractor shall comply with the provisions of the Fair Employment and Housing Act (Government Code Section 12900 et seq.), the regulations promulgated thereunder (California Administrative Code, Title 2, Sections 7285.0 et seq.), the provisions of Article 9.5, Chapter 1, Part 1, Division 3, Title 2 of the Government Code (Government Code Sections 11135 - 11139.5), and the regulations or standards adopted by the awarding State agency to implement such article. Contractor or recipient shall permit access by representatives of the Department of Fair Employment and Housing and the awarding State agency upon reasonable notice at any time during the normal business hours, but in no case less than 24 hours' notice, to such of its books, records, accounts, other sources of information and its facilities as said Department or Agency shall require to ascertain compliance with this clause. Recipient, Contractor and its subcontractors shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement. The Contractor shall include the nondiscrimination and compliance provisions of this clause in all subcontracts to perform work under the contract.

Statement of Compliance. The Contractor's signature affixed hereon and dated shall constitute a certification under penalty of perjury under the laws of the State of California that the Contractor has, unless exempted, complied with the nondiscrimination program requirements of Government Code Section 12990 and Title 2, California Code of Regulations, Section 8103.

Performance Evaluation. For consulting service agreements, Contractor's performance under this contract will be evaluated after completion. A negative evaluation will be filed with the Department of General Services

Availability of Funds. Work to be performed under this contract is subject to availability of funds through the State's normal budget process.

Audit Clause. For contracts in excess of $10,000, the contracting parties shall be subject to the examination and audit of the State Auditor for a period of three years after final payment under the contract. (Government Code Section 8546.7).

Payment Retention Clause. Ten percent of any progress payments that may be provided for under this contract shall be withheld per Public Contract Code Sections 10346 and 10379 pending satisfactory completion of all services under the contract.

Reimbursement Clause. If applicable, travel and per diem expenses to be reimbursed under this contract shall be at the same rates the State provides for unrepresented employees in accordance with the provisions of Title 2, Chapter 3, of the California Code of Regulations. Contractor's designated headquarters for the purpose of computing such expenses shall be: _____.

Disabled Veteran Business Enterprise Participation Requirement Audit Clause. Contractor or vendor agrees that the awarding department or its delegates will have the right to review, obtain, and copy all records pertaining to performance of the contract. Contractor or vendor agrees to provide the awarding department or its delegatee access to its premises, upon reasonable notice, during normal business hours for the purpose of interviewing employees and inspecting and copying such books, records, accounts, and other material that may be relevant to a matter under investigation for the purpose of determining compliance with Public Contract Code Section 10115 et seq. Contractor or vendor further agrees to maintain such records for a period of three (3) years after final payment under the contract. Title 2 CCR Section 1896.75.

Priority Hiring Considerations. For contracts in excess of $200,000, the Contractor shall give priority consideration in filling vacancies in positions funded by the contract to qualified recipients of aid under Welfare and Institutions Code Section 11200. (Public Contract Code Section 10353).

Agreement No._____

Exibit _____

ADDITIONAL STANDARD CLAUSES

Recycled Materials. Contractor hereby certifies under penalty of perjury that ____ (enter value or "0" here) percent of the materials, goods and supplies offered or products used in the performance of this Agreement meets or exceeds the minimum percentage of recycled material as defined in Sections 12161 and 12200 of the Public Contract Code.

Severability. If any provision of this Agreement is held invalid or unenforceable by any court of final jurisdiction, it is the intent of the parties that all other provisions of this Agreement be construed to remain fully valid, enforceable, and binding on the parties.

Governing Law. This Agreement is governed by and shall be interpreted in accordance with the laws of the State of California.

Y2K Language. The Contractor warrants and represents that the goods or services sold, leased, or licensed to the State of California, its agencies, or its political subdivisions, pursuant to this Agreement are "Year 2000 compliant." For purposes of this Agreement a good or service is Year 2000 compliant if it will continue to fully function before, at, and after the Year 2000 without interruption and, if applicable, with full ability to accurately and unambiguously process, display, compare, calculate, manipulate, and otherwise utilize date information. This warranty and representation supersedes all warranty disclaimers and limitations and all limitations on liability provided by or through the Contractor.

Child Support Compliance Act. For any Agreement in excess of $100,000, the Contractor acknowledges in accordance therewith, that:

1. The Contractor recognizes the importance of child and family support obligations and shall fully comply with all applicable state and federal laws relating to child and family support enforcement, including, but not limited to, disclosure of information and compliance with earnings assignment orders, as provided in Chapter 8 (commencing with Section 5200) of Part 5 of Division 9 of the Family Code; and

2. The Contractor, to the best of its knowledge, is fully complying with the earnings assignment orders of all employees and is providing the names of all new employees to the New Hire Registry maintained by the California Employment Development Department.

APPLICATION FOR FEDERAL ASSISTANCE

OMB Approval No. 0348-0043

1. TYPE OF SUBMISSION: Application [ ] Construction [X] Non-Construction; Preapplication [ ] Construction [X] Non-Construction	2. DATE SUBMITTED: 5/15/2000	Applicant Identifier:
	3. DATE RECEIVED BY STATE	State Application Identifier
	4. DATE RECEIVED BY FEDERAL AGENCY	Federal Identifier

5. APPLICANT INFORMATION

Legal Name: Sacramento River Partners

Organizational Unit:

Address *(give city, county, State, and zip code)*:
261 E. 3rd St.
Chico, CA 95928

Name and telephone number of person to be contacted on matters involving this application *(give area code)*:
John Carlon
(530) 894-3474

6. EMPLOYER IDENTIFICATION NUMBER *(EIN)*: 94-3302335

7. TYPE OF APPLICANT: *(enter appropriate letter in box)* [N]

A. State — H. Independent School Dist.
B. County — I. State Controlled Institution of Higher Learning
C. Municipal — J. Private University
D. Township — K. Indian Tribe
E. Interstate — L. Individual
F. Intermunicipal — M. Profit Organization
G. Special District — N. Other (Specify): Non-profit 501(c)(3)

8. TYPE OF APPLICATION:
[X] New [ ] Continuation [ ] Revision

If Revision, enter appropriate letter(s) in box(es): [ ] [ ]

A. Increase Award B. Decrease Award C. Increase Duration
D. Decrease Duration Other *(specify)*:

9. NAME OF FEDERAL AGENCY:
CALFED

10. CATALOG OF FEDERAL DOMESTIC ASSISTANCE NUMBER: [ ][ ]-[ ][ ][ ]
TITLE:

11. DESCRIPTIVE TITLE OF APPLICANT'S PROJECT:
Sacramento River Floodway Acquisition and Riparian Restoration

12. AREAS AFFECTED BY PROJECT *(Cities, Counties, States, etc.)*:
Glenn County, California

13. PROPOSED PROJECT		14. CONGRESSIONAL DISTRICTS OF: 2nd District	
Start Date: 9/99	Ending Date: 10/02	a. Applicant: Sacramento River Partners	b. Project

15. ESTIMATED FUNDING:

a. Federal	$ 2,219,998.00
b. Applicant	$ .00
c. State	$ .00
d. Local	$ .00
e. Other	$ .00
f. Program Income	$ .00
g. TOTAL	$ 2,219,998.00

16. IS APPLICATION SUBJECT TO REVIEW BY STATE EXECUTIVE ORDER 12372 PROCESS?

a. YES. THIS PREAPPLICATION/APPLICATION WAS MADE AVAILABLE TO THE STATE EXECUTIVE ORDER 12372 PROCESS FOR REVIEW ON:
DATE _____

b. No. [ ] PROGRAM IS NOT COVERED BY E. O. 12372
[ ] OR PROGRAM HAS NOT BEEN SELECTED BY STATE FOR REVIEW

17. IS THE APPLICANT DELINQUENT ON ANY FEDERAL DEBT?
[ ] Yes If "Yes," attach an explanation. [X] No

18. TO THE BEST OF MY KNOWLEDGE AND BELIEF, ALL DATA IN THIS APPLICATION/PREAPPLICATION ARE TRUE AND CORRECT, THE DOCUMENT HAS BEEN DULY AUTHORIZED BY THE GOVERNING BODY OF THE APPLICANT AND THE APPLICANT WILL COMPLY WITH THE ATTACHED ASSURANCES IF THE ASSISTANCE IS AWARDED.

a. Type Name of Authorized Representative	b. Title	c. Telephone Number
John Carlon	President	(530) 894-3474
d. Signature of Authorized Representative		e. Date Signed: 5/15/2000

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Standard Form 424 (Rev. 7-97)
Prescribed by OMB Circular A-102

Land Use Checklist

All applicants must fill out this Land Use Checklist for their proposal. Applications must contain answers to the following questions to be responsive and to be considered for funding. *Failure to answer these questions and include them with the application will result in the application being considered nonresponsive and not considered for funding.*

1. Do the actions in the proposal involve physical changes to the land(i.e. grading, planting vegetation, or breeching levees) or restrictions in land use (i.e. conservation easement or placement of land in a wildlife refuge)?

   x
   YES

   NO

2. If NO to # 1, explain what type of actions are involved in the proposal (i.e., research only, planning only).

3. If YES to # 1, what is the proposed land use change or restriction under the proposal?
   A) Placement of land in a wildlife refuge.

   B) Planting riparian trees

4. If YES to # 1, is the land currently under a Williamson Act contract?

   YES

   x
   NO

5. If YES to # 1, answer the following:

   Current land use: Riparian, orchards
   Current zoning: AE-40, agriculture 40 acre minimm
   Current general plan designation: Intensive agriculture

6. If YES to #1, is the land classified as Prime Farmland, Farmland of Statewide Importance or Unique Farmland on the Department of Conservation Important Farmland Maps?

   YES

   NO

   x
   DON'T KNOW

7. If YES to # 1, how many acres of land will be subject to physical change or land use restrictions under the proposal?
   96

8. If YES to # 1, is the property currently being commercially farmed or grazed?

   x
   YES

   NO

9. If YES to #8, what are

   the number of employees/acre .0038
   the total number of employees 1

10. Will the applicant acquire any interest in land under the proposal (fee title or a conservation easement)?

_____	x
YES	NO

11. What entity/organization will hold the interest? U.S. Fish and Wildlife Service (FWS)

12. If YES to # 10, answer the following:

Total number of acres to be acquired under proposal	_____
Number of acres to be acquired in fee	_____
Number of acres to be subject to conservation easement	_____

13. For all proposals involving physical changes to the land or restriction in land use, describe what entity or organization will:

manage the property	U.S. FWS
provide operations and maintenance services	U.S. FWS
conduct monitoring	U.S. FWS

14. For land acquisitions (fee title or easements), will existing water rights also be acquired?

x	_____
YES	NO

15. Does the applicant propose any modifications to the water right or change in the delivery of the water?

x	_____
YES	NO

16. If YES to # 15, describe Sacramento River Partners will continue pumping from the existing wells on the property until all restoration work has been completed. At that point, ground water pumping will be discontinued.

Environmental Compliance Checklist

All applicants must fill out this Environmental Compliance Checklist. Applications must contain answers to the following questions to be responsive and to be considered for funding. *Failure to answer these questions and include them with the application will result in the application being considered nonresponsive and not considered for funding.*

1. **Do any of the actions included in the proposal require compliance with either the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA), or both?**

   x
   YES

   NO

2. **If you answered yes to # 1, identify the lead governmental agency for CEQA/NEPA compliance.**

   U.S. Fish and Wildlife Service
   Lead Agency

3. **If you answered no to # 1, explain why CEQA/NEPA compliance is not required for the actions in the proposal.**

4. **If CEQA/NEPA compliance is required, describe how the project will comply with either or both of these laws. Describe where the project is in the compliance process and the expected date of completion.**

   NEPA compliance will be required to restore the 96 acre almond orchard. We will begin this process once the property has been acquired and transfered to USFWS.

5. **Will the applicant require access across public or private property that the applicant does not own to accomplish the activities in the proposal?**

   YES

   x
   NO

   If yes, the applicant must attach written permission for access from the relevant property owner(s). Failure to include written permission for access may result in disqualification of the proposal during the review process. Research and monitoring field projects for which specific field locations have not been identified will be required to provide access needs and permission for access with 30 days of notification of approval.

6. Please indicate what permits or other approvals may be required for the activities contained in your proposal. Check all boxes that apply.

LOCAL		
Conditional use permit	___	
Variance	___	
Subdivision Map Act approval	___	
Grading permit	___	
General plan amendment	___	
Specific plan approval	___	
Rezone	___	
Williamson Act Contract cancellation	___	
Other _____ (please specify)		
None required	___	
STATE		
CESA Compliance	___	(CDFG)
Streambed alteration permit	___	(CDFG)
CWA § 401 certification	___	(RWQCB)
Coastal development permit	___	(Coastal Commission/BCDC)
Reclamation Board approval	X	
Notification	___	(DPC, BCDC)
Other _____ (please specify)		
None required	___	
FEDERAL		
ESA Consultation	___	(USFWS)
Rivers & Harbors Act permit	___	(ACOE)
CWA § 404 permit	___	(ACOE)
Other _____ (please specify)		
None required	X	

DPC = Delta Protection Commission
CWA = Clean Water Act
CESA = California Endangered Species Act
USFWS = U.S. Fish and Wildlife Service
ACOE = U.S. Army Corps of Engineers

ESA = Endangered Species Act
CDFG = California Department of Fish and Game
RWQCB = Regional Water Quality Control Board
BCDC= Bay Conservation and Development Comm.

Exhibit 1 : Local Notification Letters

Sacramento River Partners
261 East 3rd Street
Chico, CA 95928
Phone (530) 894-3474 Fax (530) 894-2970

May 12, 2000

John Benoit
Director
Glenn County Resource, Planning and Development
125 S Murdock Avenue
Willows, CA 95988

Re: Sacramento River Partner's CALFED Proposal

Dear Mr. Benoit:

The purpose of this letter is to inform you that Sacramento River Partners is submitting a proposal to CALFED for funding to acquire and restore land in Glenn County. The proposed acquisition consists of 27 acres of existing riparian habitat, 96 acres of almonds, and 139 acres of walnuts. The proposal also requests funding to convert the 96-acre flood-prone almond orchard back into riparian habitat. Please see the enclosed proposal for additional information.

We have discussed this project with all five of the adjoining landowners and three of them have written letters in support of the project. We also have a letter of support from a farmer who previously owned this property. His letter does a good job of pointing out the economic challenges associated with farming almonds and walnuts inside the Goose Lake overflow.

I have discussed this project with Denny Bungarz and invited him and any other interested Glenn County Supervisor to visit the site and review our proposal.

Please call me if you have any questions of require additional information.

Sincerely,

John Carlon
President
Sacramento River Partners

Enclosure: CALFED Acquisition and Restoration Proposal

Sacramento River Partners
261 East 3rd Street
Chico, CA 95928
Phone (530) 894-3474 Fax (530) 894-2970

May 12, 2000

Vince Minto
Clerk of the Glenn County Board of Supervisors
P.O. Box 391
Willows, CA 95988

Re: Sacramento River Partner's CALFED Proposal

Dear Mr. Minto:

The purpose of this letter is to inform you that Sacramento River Partners is submitting a proposal to CALFED for funding to acquire and restore land in Glenn County. The proposed acquisition consists of 27 acres of existing riparian habitat, 96 acres of almonds, and 139 acres of walnuts. The proposal also requests funding to convert the 96-acre flood-prone almond orchard back into riparian habitat. Please see the enclosed proposal for additional information.

We have discussed this project with all five of the adjoining landowners and three of them have written letters in support of the project. We also have a letter of support from a farmer who previously owned this property. His letter does a good job of pointing out the economic challenges associated with farming almonds and walnuts inside the Goose Lake overflow area.

I have discussed this project with Denny Bungarz and invited him and any other interested Glenn County Supervisor to visit the site and review our proposal.

Please call me if you have any questions of require additional information.

Sincerely,

John Carlon
President
Sacramento River Partners

Enclosure: CALFED Acquisition and Restoration Proposal

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Sacramento National Wildlife Refuge Complex
752 County Road 99W, Willows, California 95988

IN REPLY REFER TO:

May 11, 2000

Mr. Steve Richie
Acting Executive Director
CALFED Bay-Delta Program
1416 Ninth Street, Suite 1155
Sacramento, CA 95814

Dear Mr. Richie:

The purpose of this letter is to inform you of my strong support for the proposal submitted by Sacramento River Partners to the CALFED Bay-Delta Program. The proposal requests funding to acquire 259 acres comprised of walnut and almond orchards, and riparian habitat bordering the Llano Seco Unit of the Sacramento River National Wildlife Refuge (Refuge). Congress authorized the establishment of the Refuge in 1989. The project area encompasses over 100 river miles between the cities of Red Bluff and Colusa with a target of 18,000 fee title acres. The purposes for which the Refuge was established are: 1) To protect and provide habitat for threatened and endangered species; 2) To protect and provide habitat for migratory birds; 3) To restore riparian vegetation and habitat; 4) To provide opportunities for management oriented research and monitoring; and, 5) To provide the public with opportunities for conservation oriented activities. To date the U.S. Fish and Wildlife Service has acquired 12,000 acres of land for the Refuge.

The Refuge supports Sacramento River Partners' proposal for several reasons important to accomplishing our conservation and stewardship objectives. The acquisition will expand and add to an existing 14,000 acre habitat conservation effort already underway on the Llano Seco Unit to the north and the Refuge's 400 acre Hartley Island Unit to the southeast. The acquisition site will provide critically needed habitat to threatened and endangered species as well as neo-tropical migratory birds. Acquiring and converting the flood-prone agricultural land back into riparian forest will fill a biological void between two large blocks of existent habitat.

The U.S. Fish and Wildlife Service welcomes the opportunity to work with Sacramento River Partners, landowners and irrigation districts on this acquisition project. It is important for the

Refuge to encourage the local community in our conservation efforts. Sacramento River Partners is ideally suited for this task and provides an important link to both environmental groups and the agricultural community. The physical potential of the site combined with a public-private-nonprofit team of collaborators offer all of the components of a model conservation project.

I urge you to support this proposal.

Sincerely,

Kevin S. Foerster
Refuge Manager

Richard Thieriot

May 12, 2000

Mr. Steve Ritchie
Acting Executive Director
CALFED Bay-Delta Program
1416 Ninth Street, Suite 1155
Sacramento, CA 95814

Dear Mr. Ritchie,

I am writing to express my strong support for the proposal submitted by Sacramento River Partners to the CALFED Bay-Delta Program. The proposal requests funding to acquire 259 acres of flood-prone farmland and to restore 95 of these acres back into wetland and riparian forest.

The proposed acquisition is property that borders my ranch to the south. As a landowner, I welcome this acquisition and the opportunity to have the U.S. Fish and Wildlife Service as my neighbor. I also support the conversion of the flood-prone almond orchard back into riparian forest. Currently, I am reforesting some of my own land and I'm very interested in developing wildlife habitat along this reach of the river.

The proposed project makes sense from a wildlife, agricultural, and flood damage reduction perspective.

I urge you to support this proposal.

Sincerely,

Richard Thieriot

Mr. Steve Ritchie
Acting Executive Director
CALFED Bay- Delta Program
1416 Ninth St. (Suite 1155)
Sacramento, Ca. 95814

Dear Mr. Ritchie:

Please add my name to the list of adjoining landowners and hunters. Who strongly support the proposal submitted by Sacramento River Partners to the CALFED Bay- Delta Program. This proposal requests funding to acquire 259 acres of flood prone farmland. And to restore 95 of these acres back into wetland and riparian forest.

As one of the landowners of a 125 acre parcel directly adjoining the subject 259 acre parcel to the east, and specifically the 95 acres that are to be restored to wetland. I strongly support and welcome this acquisition. I also look forward to the US Fish and Wildlife Service becoming my neighbor. The conversion of the flood prone almond orchard back into riparian forest. Would greatly enhance the wildlife habitat along this section of the Sacramento River. And merge nicely with my 125 acre property. Which is already being restored into natural habitat and permanent wetland. I and my two partners, are very serious and interested in developing wildlife habitat with our own property. And have planted several hundred willow and cottonwood trees. Installed over twenty Wood Duck nesting boxes and Mallard nests. As well as a upland slough and brood pond.

This proposed project not only makes sense from a reduction of flood damage perspective. But will greatly benefit many types of wildlife. By adjoining smaller parcels of land together with common goals and ideas for habitat restoration. Thus forming a much larger area of conforming habitat.

I urge you to support this proposal!

Sincerely,

Dennis Hansing
624 Almond Grove Ct.
Chico, Ca. 95973